

Remarks/Arguments

Claims 1-40 are pending.

Claims 8-38 stand withdrawn.

Claims 1-5, 7 and 39 stand rejected.

Claim 40 stands allowed.

Claim 6 stands objected to. In response, claim 6 has been rewritten in independent form, incorporating all of the limitations of claims 1, 4 and 5, prior to the present amendment.

Claim 1 has been amended, without prejudice or disclaimer.

Claims 41-43 are new.

Restriction of Claims 8-38

Applicant notes that the Examiner has made the requirement to restrict between the invention of Group I, claims 1-7, and the inventions of Groups II-IX, corresponding to claims 8-38, final. Applicant previously elected Group I, with traverse. Claims 8-38 have been withdrawn. Accordingly, no action is believed to be required of Applicant at this time with respect to the restriction requirement.

Rejection of Claim 39 Under 35 U.S.C. 112, second paragraph.

Applicant understands that the rejection of Claim 39 stands rejected under 35 U.S.C. 112, second paragraph, has been overcome by the Amendment filed March 2, 2007.

As this was the sole ground of rejection of claim 39, it is respectfully submitted that claim 39 is in condition for allowance.

35 USC 103 Rejections

The Examiner's statement in the Advisory Action that the Applicant's arguments with respect to the rejection of Claims 1-5 under 35 USC 103(a) over Petroski (U.S. Patent No. 6,481,874) are persuasive is gratefully acknowledged.

Claims 1-2, 4-5 and 7 stand rejected under 35 USC 103(a) as being unpatentable over Galli (US 2004/013892). Claim 3 stands rejected under 35 USC 103(a) as being unpatentable over Galli '892 in view of Petroski. These rejections are respectfully traversed, for the reasons set forth in detail below.

Rejection of Claims 1-2, 4-5 and 7 under 35 USC 103(a) Over Galli (US 2004/0130892).

With regard to the rejection of claim 1 in view of Galli, the Examiner states in the Advisory Action that, regardless of the lamp being used, Galli uses heat sink 20 and 24 to dissipate the captured heat from out of the lamp assembly. The Examiner further states that since all lamps, such as lamp 30 of Galli, and all circuit boards, such as board 38 of Galli, generate heat, one skilled in the art would not remove heat sink 20, 24 when replacing the LED with another light source. The Examiner further states that Galli states in Paragraph 27 the LED can be replaced by a conventional filament lamp or xenon lamp.

Claim 1 has been amended to recite, inter alia, that the heat sink is coupled to the housing at least rearward of the lamp. Disclosure support is found, for example, in Fig. 2, and generally at page 11, lines 8-12.

The portion of Galli that serves as a heat sink is receiver sleeve 20, which includes a narrow tail section 24 ("The receiver sleeve 20 is a tubular element with rear wall 22 and a tail section 24 extending therefrom." Paragraph [0024].) One of ordinary skill in the art would not modify the receiver sleeve 24 of Galli to provide "a heat sink coupled to the housing at least rearward of the lamp."

Receiver sleeve 20 serves the purposes of (1) aligning the lamp ("In this manner the lighting element 30 is received into the tail portion 24 and retained in a position that

centers the lighting element 30 in the aperture 26 in the rear wall 22 of the receiver sleeve 20 and places the optical axis of the lighting element 30 into alignment with the central axis 28 of the receiver sleeve 20." Paragraph [0026].); (2) providing an electrical connection between the circuit board and ("an electrically conductive path is formed from the body of the receiver 20 through the tail piece 24, into the contact pad 40 on the mounting board 38 and directly to one of the contact leads 34 of the lighting element 30. This electrically conductive pathway facilitates electrical connection to the lighting element 30 on the mounting board 38 with out the need to include additional wire bonds or spring." Paragraph [0027].); and (3) heat dissipation ("This direct conductivity pathway between the lead 34 of the lighting element 30 and the receiver sleeve 20 also serves the secondary purpose by providing a thermally conductive pathway to dissipate heat from the lighting element 30." and "Additionally, since the walls of the tail portion 24 of the receiver 20 are in close proximity to the optical portion 32 of the lighting element 30, heat that is radiated by the lighting element 30 is also absorbed by the walls of the tail portion 24 and further dissipated by the receiver sleeve 20." Paragraph [0028]).

Since the receiver is located around the lamp of Galli, the receiver serves its primary purpose of aligning the lamp, as well one of its secondary purposes of absorbing heat radiated by lighting element 30. One of ordinary skill would not modify receiver 20 of Galli to contact the housing rearward of the lamp, as recited in amended claim 1. However, by contacting the housing rearward of the lamp, the heat sink as recited in claim 1 advantageously dissipates heat from a circuit board located rearward of the lamp, as well as providing heat dissipation to the large area of the housing located rearward of the lamp. The receiver of Galli dissipates heat only to the portion of the housing forward of the lamp.

In view of the foregoing, reconsideration and removal of the 35 USC 103 rejection of claim 1 over Galli '982 is respectfully requested.

Claims 2, 4-5 and 7 depend ultimately from allowable Claim 1, and the rejection of those claims over Galli '892 should be withdrawn for at least the same reasons.

Rejection of Claim 3 under 35 USC 103(a) over Galli '892 in view of Petroski (U.S. Patent No. 6,481,874).

Claim 3 stands rejected under 35 USC 103(a) as being unpatentable over Galli '892 in view of Petroski. Claim 3 depends from Claim 1, and accordingly is allowable at least by virtue of its dependence from an allowable base claim.

In view of the foregoing, claims 1-5 and 7 are allowable.

New Claims 41-43

New claim 41 is an independent claim. Disclosure support is found, for example, in Fig. 2 and generally at page 10, line 23 to page 11, line 12. New claim 41 includes the limitations:

a printed circuit board extending longitudinally within the housing and having a first surface and a second surface opposite said first surface, and including circuitry to regulate and control power supplied to the lamp; a heat sink mounted onto a portion of said first surface of said circuit board, the heat sink also coupled to the housing to dissipate heat generated by the printed circuit board, and a battery to furnish power electrically coupled to said printed circuit board and located intermediate said second surface of said printed circuit board and an interior surface of said housing.

Clearly, Galli, which discloses a circuit board 38 transverse to the tubular housing 12 and battery 16 entirely rearward of circuit board 38, neither anticipates nor renders obvious at least the foregoing limitations of claim 41.

New claim 42 depends from new independent claim 41 and recites that the printed circuit board extends longitudinally rearward of the lamp, and that the heat sink is in contact with the housing at least rearward of the lamp. At least in view of the dependence of claim 42 from allowable new independent claim 41, and for the reasons set forth above in connection with claim 1, new claim 42 is allowable.

New claim 43 depends from claim 1, and recites that a reflector is disposed about the lamp. Disclosure support is found, for example, in original claim 31. New claim 43 is allowable at least by virtue of its dependence from allowable base claim 1.

Furthermore, in Galli, receiver sleeve 20 surrounds the lamp, thereby leaving no place to install a reflector. For at least this additional reason, claim 43 is allowable over Galli.

Allowable Subject Matter

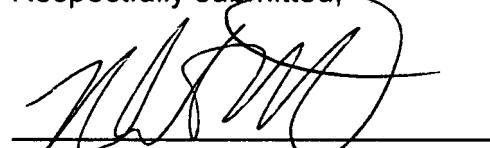
The allowance of claim 40, and the indication of allowable subject matter in claim 6, are gratefully acknowledged. As noted above, claim 6 has been rewritten to incorporate the subject matter of claims 1, 4 and 5, prior to the present amendment. Accordingly, claim 6 is in condition for allowance.

CONCLUSION

Wherefore, Applicant believes he has addressed all outstanding matters, and respectfully requests that claims 1-7 and 39-43 be allowed.

Should there be any questions or outstanding matters, the Examiner is cordially invited and requested to contact Applicant's undersigned attorney at his number listed below.

Respectfully submitted,



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